25.03. mSupply client / server installation part 3

These steps need to be carried out after completing the steps described in: 20.01 mSupply client/server installation part 1 20.02 mSupply client/server installation part 2

Obtaining a data file

If you are setting up a sync site for a synced system, then you will need to:

- 1. Generate the XML file for the sync site from the central server refer 29.04. Sync Site Export
- 2. If creating a single-user sync site:
 - 1. Transfer the XML file to the sync site. The Dropbox that you configured in Install Dropbox is handy for this purpose.
 - 2. Create the datafile from this XML file through 29.05. Sync Site Import.
- 3. If creating a server sync site:
 - Create the datafile from this XML file through 29.05. Sync Site Import. This could be done on the server, but is normally easier to do 'locally'. Make sure you are NOT using a version of mSupply more recent than that being installed on the server.
 - 2. Transfer the datafile to the sync site. The Dropbox that you configured in Install Dropbox is handy for this purpose.

Installing mSupply Server software

If you are upgrading from a previous version...

If you are upgrading from a previous version of mSupply, first perform a data backup:

- With mSupply server open as an application click on **File> Backup...**. This will generate a backup file of your current data with file extension .4bk.
- Copy this file to *at least one* safe place, e.g. USB drive, a cloud service such as Dropbox.
- Continue only when the .4bk file has completed transfer to the remote location.

Moving from pre v3.50?

There was a major upgrade of mSupply's internal structure in v3.50. If you are upgrading from a pre v3.50 installation of mSupply, Sustainable Solutions will need to convert your data so that it can be read by mSupply versions after v3.50. This conversion process is provided free of charge.

Obtain and run the mSupply Server installer

The client/server version of mSupply has two installers:

- One installer, with the word Server in the title, is used to install the **mSupply Server** software on a single server computer.
- The other installer, with the word Client in the title, is used to install the **mSupply Client** software on as many computers as you wish *including on the server computer*. You will be limited in how many clients can *connect* at any one time by the server licence you have purchased.

You must be logged on as Administrator to install mSupply Server with the correct permissions. Please consult your IT support staff if you require assistance to achieve this.

Once you have obtained the mSupply Server installer file, double click it to install. Here is what the mSupply server installation window should look like:

🌄 mSupply Server Setup	×
Installation Folder Where would you like mSupply Server to be installed?	S +
The software will be installed in the folder listed below. To select a different location, new path, or click Change to browse for an existing folder.	either type in a
Install mSupply Server to:	
C:\Program Files\mSupply\mSupply Server	C <u>h</u> ange
Space required: 641.1 MB Space available on selected drive: 880.66 GB	
< <u>B</u> ack <u>N</u> ext >	<u>C</u> ancel

• You may be asked by the operating system whether 'you want to allow this app to make

changes to your device?'. Click **Yes**

- At the mSupply Server Setup Welcome screen, click Next
- To proceed with the installation, you will need to click on the 'I agree to the terms of this license agreement' radio button and click **Next**
- Unless you have good reason to do otherwise, *don't* change the installation folder, and click Next
- Unless you have good reason to do otherwise, don't change the Shortcut folder, and click Next
- At the Ready to Install window, click Next
- After some time (minutes!) you will be shown the **Installation Successful** window. Click **Finish**

What is installed where:

We strongly recommend you do not change the default installation directories, which are as follows:

- mSupply Server: C:\Program files\mSupply\mSupply Server
- mSupply Client (see Installing mSupply Client below): C:\mSupply Client

mSupply Server installer also installs the following files and folders:

🗟 🔍 💌 🐌 🕨 Computer 🕨 Local Di	k (C:) ► Program Files ► mSupply ► mSupply Server ► reports ►	 ✓ 49 Search report 	rts P
File Edit View Tools Help			
Organize 👻 Include in library 👻	Share with Vew folder	8≡ ▼	
🛛 斗 MSBuild	* Name	Date modified	Туре 🔶
 Multiply mSupply mSupply Server 	🎴 .svn	21/05/2013 11:38	File folder
4d Extensions	DS_Store	09/05/2013 18:09	DS_STORE
Components	Active_remote_sync_site.pproreP	21/01/2013 13:09	PPROREP I
Native Components	backorder_summary.4QR	19/03/2013 17:12	4D Quick F
b Dluging	backorder_summary_groupby_name.4qr	21/01/2013 13:09	4D Quick F
h annarts	— med_occupancy_rate.4qr	21/01/2013 13:09	4D Quick F
Parauras	bet_bonus_by_cust_tot.4QR	21/01/2013 13:09	4D Quick F
P in Resources	bet_bonus_by_customer.4QR	21/01/2013 13:09	4D Quick F
Server Database	👼 bet_discount.4QR	21/01/2013 13:09	4D Quick F
Upgrade4DClient	bet_donation.4QR	21/01/2013 13:09	4D Quick F
P 📁 Ncell Connect	bet_donation_by_name.4QR	21/01/2013 13:09	4D Quick F

Starting the Server for the first time

- There is no point in carrying out the following steps unless you are ready to create a new mSupply data file, or you have one to load.
 - If this is a satellite site on a synced system, you should have one to load refer .

Run mSupply Server

We need to run mSupply Server as an application until all configuration is completed. Don't run as a Service now as some configuration functionality is not enabled when run as Service.

Sometime it has been useful to allow the *mSupply.exe* to run as Administrator by default. This gives the application the right to modify data in folders that may have been unknowingly restricted by operating system.

View the *mSupply.exe* file inside the mSupply installation folder. View properties then Compatibility tab and set the file to always *Run this program as an administrator*. View the image below for better guidance.

Name		Date	modified	1	Туре	Size	e
Components		12/0	5/2020 19	:03	File folder		
Licenses		12/0	5/2020 19	:05	File folder		
Native Components	約 mSup	oply.exe Prop	erties			×	
reports	General	Compatibility	Security	Details	Previous Versions		
Resources Server Database Upgrade4DClient	If this pr try runni	ogram isn't wor ing the compati	king corre bility troubl	ctly on thi leshooter	s version of Windows,		
to mSupply.exe	Handa	L shoose com					9,650 KB
④ 4D Compiler.dll ⑥ 4Dlibzip.dll ⑥ 4DMsg.dll ⑥ 4DSLI.dll ⑧ 4Dzlib.dll ⑨ codeeditor.dll ⑨ DB4D.dll ⑨ Graphics.dll ⑨ GUI.dll ⑨ futpserver.dll ⑨ icu.dll ⑨ Kernel.dll	Settin	atibility mode un this program lows 8 educed color m (256) color un in 640 x 480 sable display so un this program	in compati ode screen ret caling on h as an adm	bility mod bility mod solution igh DPI s inistrator	ettings		548 KB 112 KB 7 KB 24 KB 80 KB 397 KB 6,111 KB 2,185 KB 2,219 KB 505 KB 3,850 KB 2,004 KB
KernellPC.dll Ianguagesyntax.dll LDAPComponent.dll libeay32.dll libhunspell.dll	Ch	ange settings f	or all users OK		Cancel Apply	r	352 KB 1,258 KB 437 KB 1,624 KB 446 KB

We need to run the mSupply Server software as Administrator.

Find the mSupply Server executable (C:\Program files\mSupply\mSupply Server\mSupply.exe), right-click on it and select **Run as administrator**

	Open
	Open file location
	Run as administrator
	Troubleshoot compatibility
	Pin to Start
٢	Upload to MEGA (1 file)
	Edit with Notepad++
	Scan with F-PROT Antivirus
	Pin to Taskbar
	Send to +
	Cut
	Сору
	Create shortcut
	Delete
	Rename
	Properties

You will then be presented with the following dialogue box:



Click **Create** to create a new data file or **Open** to choose an existing data file. The below image shows an existing data file.



Since Windows version 1803 and following, there can be issues with permissions to access folders located in individual user folders such as under My Documents. Therefore, it is now highly recommended to save your data file in the folder: C:\ServerName_mSupply_data replacing ServerName with the mSupply server (site) name, eg. C:\Hagen_AMS_mSupply_data.

You may get a question from the Windows Firewall requesting permission for mSupply to communicate through the Firewall.

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Allow mSupply to communicate on both private and public networks.

If the above steps have succeeded, you should see the 4D Server Administration window:



Configure backups

• Edit > Settings > User settings for Data file > Backup tab

- Scheduler: Set Automatic Backup: to Every day, at 20:00 or later, as long as it is a time when work is likely to be finished. It will have to be set earlier, say 16:00 if the server is switched off of an evening.
- Configuration:
 - Content:
 - tick Data File
 - untick Structure File
 - untick User Structure File
 - Delete all 'Attachments' except the .4DIndx file.
 - Add the journal (journal) files to the backup. The Journal file cannot be selected until you have configured it under **Log Management** below, and run the backup once, which you can do once the backup settings have been configured. Once these have been configured, the backup contents should look something like this:

		-
Scheduler	Configuration	Backup & Restore

Content
🗹 Data
Structure
User Structure (only for binary database)
Attachments:
"time involume "D:"
Delete Add folder Add file

 If this server uses the Dashboard, then add the dashboard configuration files (normally C:\Program Files\mSupply Dashboard\data\grafana.db and C:\Program Files\mSupply Dashboard\conf\custom.ini) to the backup - see here (noting that the journal file hasn't been added yet!):

Content			
	🗹 Data File		
	Structure File		
	User Structure File		
Attachn	nents: "grafana.db" in volume "C:" "custom.ini" in volume "C:" ,/ data.4DIndx		^
			~
	Delete	Add folder	Add file

• Backup File Destination Folder

- $\circ\,$ If on physical hardware, this should be a separate physical disk (e.g.
 - D:\mSupply_backups).
- If on a virtual machine it is preferable to store the backups on a separate virtual disk.
- Log Management: Set .journal to the same parent folder as the backups.

If a location of the log file is already specified, and you want to change it, you need to untick the "Use Log" tick-box and then when you re-tick it you will be prompted for a new location.

- Backup & Restore
 - General settings
 - tick Keep only last 30 backup files (dependent on disk storage space).
 - tick Backup only if the data file has been modified
 - Delete oldest backup file after backup
 - If backup fails: select Retry after 30 Seconds
 - tick Cancel the operation after 5 attempts.

• Archive

- Segment Size (Mb): None
- Compression Rate: Compact
- Interlacing Rate: None
- Redundancy Rate: None

• Automatic Restore

- tick Restore last backup if database is damaged
- tick Integrate last log if database is incomplete
- Click OK

You may see the following dialogue box:

Warning



The log file will be activated after the next backup of the data file. Do you want to start the backup automatically?

Cancel

ОК

• Click **OK** to create the first backup.

Configure cache

Edit > Database Settings > User settings for Data file

Last update: 2023/06/02 00:04 admin:server_installation_3 https://docs.msupply.org.nz/admin:server_installation_3?rev=1685664290



Select **Database** and then set up the cache memory.

- Tick Calculation of adaptive cache
- Memory to be reserved for other applications and for the system: = 512 MB (default?)
- Percentage of the available memory used for cache = 100%. According to the 4D v16.5 Database/Memory page, 'Percentage of the available memory used for the cache = 100% since there is only one 4D Server application.' If other applications running on the server need additional RAM, it should be added to the figure above.
- Minimum size = 1,000 MB (default?)
- Maximum size = can be set to any number, including greater than available RAM. If this number is greater than the available RAM, 4D will adapt the size of the cache according to the actual available RAM.
- Flush Cache every: 2 Minutes

🏩 n	Supply	У													
File	mSup	pply -	User Settin	gs for Dat	ta file										
Mo	Inter	face	Database	Backup	Client-server	WEB Web	sqL sqL	PHP PHP							
100 %	м	1emory	(
		Data	base Cach	e Setting	s										
					Calculation of a	adaptive c	ache								
					Me	mory to b	e reserve	d for othe	er application	s and for the system:	512	MB			
1 mn							Perce	ntage of	available me	mory used for cache:	100	%			
										Minimum Size:	1000	MB			
Overv										Maximum Size:	16000	MB			
										Physical Memory: Current Cache:	16383 MB 2500 MB	3			
										Cache on Restart:	15871 MB	}			
										Flush Cache every:	2	Minutes	•	•	

- Click **OK**
- Exit 4D Server Administration window.
- Check that the settings.4DSettings file has been created in the <DataFolder>/Settings folder

Setting the server software to run as a service

The server should now be set to start automatically when the machine is turned on. This can be accomplished by setting the server to run as a service. Choose **File > Register Current Database as Service**.



If the **Register Current Database as Service** option is greyed out, you are probably not running the mSupply Server as Administrator. You need to quit the server and run **as Administrator**.

約 m	Supply				
File	Edit Window Help				
14	New	+			
	Open	Ctrl+O			
	Open Recent	•			
	Close Database	Ctrl+Shift+Alt+W			
	Close Window	Ctrl+W			
	Close All Windows	Ctrl+Alt+W			
	Register Current Database as Service				
	Unregister Current Database				
	Unregister all Server Services				
	Flush Data Buffers	Ctrl+Shift+Alt+S			
	Backup				
	Restore				
	Quit	Ctrl+Q			

Once you have registered the Current Database as Service, Quit the 4D by clicking the close box on the top right (or choose *File* > *Quit* from the menus). You will then be shown a disconnect window something like this (you can select Disconnect all clients and quit if no users are currently active):

4D Server	
	 Disconnect from Server in: 10 min. Wait for all clients to disconnect. (Ignore sleeping clients)
	O Disconnect all clients and quit. Cancel OK

Pin Services to the taskbar

It is important to be able to quickly observe the status of the 4D / mSupply Service. Therefore, we pin

Services to the taskbar:

- Click Windows icon
- Type Services
- Right-click the Services Desktop App
- Select Pin to taskbar

Configure mSupply Service settings

Click on **Services** in the task bar. You will be shown a window like this.

🍓 Service	25							_	
Action	<u>V</u> iew] ←	\Rightarrow	🛍 📧 😭 🚱	😫] 🕨	- II -	Þ		
Tree				Name 🛆	Description	Status	Startup Type	Log On As	
Service	s (Local)			4D Server: mSupply			Manual	LocalSystem	
			- 1	🆓 Alerter	Notifies sel		Manual	LocalSystem	
			- 1	🍓 Application Manage	Provides s		Manual	LocalSystem	
			- 1	🍓 ClipBook	Supports C		Manual	LocalSystem	
			- 1	🆓 COM+ Event System	Provides a	Started	Manual	LocalSystem	
			- 1	🆓 Computer Browser	Maintains a	Started	Automatic	LocalSystem	
			- 1	🆓 DHCP Client	Manages n	Started	Automatic	LocalSystem	
			- 1	🆓 Distributed Link Tra	Sends notif	Started	Automatic	LocalSystem	
			- 1	🖏 Distributed Transac	Coordinate	Started	Manual	LocalSystem	
			- 1	🎭 DNS Client	Resolves a	Started	Automatic	LocalSystem	
			- 1	🎭 Event Log	Logs event	Started	Automatic	LocalSystem	
			- 1	🎭 Fax Service	Helps you		Manual	LocalSystem	
			- 1	🆓 Indexing Service			Manual	LocalSystem	
			- 1	🆓 Internet Connectio	Provides n		Manual	LocalSystem	
			- 1	🆓 IPSEC Policy Agent	Manages I	Started	Automatic	LocalSystem	
			- 1	🏶 Logical Disk Manager	Logical Disk	Started	Automatic	LocalSystem	
			- 1	🍓 Logical Disk Manage	Administrat		Manual	LocalSystem	
				🏶 Messenger	Sends and	Started	Automatic	LocalSystem	
			- 1	🆏 Net Logon	Supports p		Manual	LocalSystem	
				NetMeeting Remote	Allows aut		Manual	LocalSystem	
				Network Connections	Manages o	Started	Manual	LocalSystem	•

Double-click on **4DServer: mSupply** - fortunately it is usually the first item in the list!

You will be shown the **4DServer: mSupply service properties** window. Change the *Startup type* in the drop-down list to *automatic (Delayed start)*.

4D Server	: mSuppl	y Propertie	s (Local Com	puter)		×
General	Log On	Recovery	Dependencie	es		
Service	name:	4DS msup	ply			
Display	name:	4D Server:	mSupply			
Descrip	tion:				0	1
Path to C:\Prog	executabl ram Files	e: (x86)\mSupp	ly∖mSupply Se	erver\mSupply	.exe -s "C:\Prog	est.
Startup	type:	Automatic Automatic Automatic Manual	(Delayed Star (Delayed Star	t) t)	~	r
Service	status:	Disabled				
S	itart	Stop	5	Pause	Resume	
You car from her Start pa	n specify t re. irameters:	he start para	meters that ap	ply when you	start the service	
			OK	Cance	Apply	,

Log on as administrator account

With mSupply 3.85+ on Windows Server 2012+ and Windows 10 1803+ the service has had to be assigned to "Log On" to an administrator account for mSupply service to start:

Services (Local)		
4D Server: mSupply	Nam 4D Server: mSupply Properties (Local Computer)	×
Stop the service Restart the service	Image: Constraint of the second se	
	Local System account Al Al	
	A This account: .V.Administrator Browse	
	Al Password:	
	Confirm password:	
	ä.a	
	(G), A1 (G), Ba	
	Q, B.	•
	Can Ba	
	Q, B Q, C	
	a a	0
	CDELleasSus Sh22asds scalad to P. Punning Automatic	

Configure the computer to restart if the mSupply service does not start

- Sometimes, for some reason, including, for example, after certain Windows OS updates, the mSupply Service will not automatically start, even though you have configured it to.
- To guard against this, it may be worth configuring the computer to restart if the mSupply service has not started after a LONG delay, say 120 minutes. This is done on the **Recovery** tab:

🔅 Services						- 🗆	\times
File Action View	Help						
Þ 🔿 🔲 🖬 🍳	🗟 🛛 🖬 🕨 🔳 🕪						
Services (Local)	Services (Local)	4D Server: mSupply Properties	s (Local Computer)	\times			
	4D Server: mSupply	General Log On Recovery	Dependencies			Status	Start ^
	<u>Stop</u> the service <u>Restart</u> the service	Select the computer's respons actions.	e if this service fails. <u>Help me set up rec</u>	overy	oftware up to date. If this service is oftware up to date. If this service is	Pupping	Autc Man
		First failure:	Restart the Service	\sim	Control validation for the installatio	Kunning	Man
		Second failure:	Restart the Service	_	<u></u>	D	
		Subsequent failures:	Restart the Computer	Kestart	Computer Options		~
		Reset fail count after:	0 days	Restart	computer after: 120 minutes		
		Restart service after:	1 minutes	Befo	pre restart, send this message to computers	on the netwo	rk:
		Enable actions for stops wi	th errors. Restart Computer Options				^
		Run program					
		Program:					
			Browse				~
		Command line parameters:					
		Append fail count to end	l of command line (/fail=%1%)		0	К	Cancel
					is used by Windows Backup to perf		Man

Manually starting the Service

Despite being configured so, the mSupply Service sometimes will not start when the server hardware starts. The service can be started through the Services:

Q		Servio	ces					đ	x
File Action View	Help								
	à 🔒 🛿 🖬 🕨 🔳 🕪								
Services (Local)	Services (Local)								
	4D Server: mSupply	Name 🔺	Description	Status	Startup Type	Log On As			~
		🐫 4D Server: mSupply			Automatic (D	Local Syste			
(<u>Start</u> the service	🔍 ActiveX Installer (AxInstSV)	Provides Us		Manual	Local Syste			_
		鵒 Advanced Monitoring Agent		Running	Automatic	Local Syste			=
		🔍 Advanced Monitoring Agen	Add-on ser	Running	Automatic (D	Local Syste			
		🔍 App Readiness	Gets apps re		Manual	Local Syste			

Manually stopping the mSupply Server Service

• To manually stop the mSupply Server Service, first make sure clients are not connected, then double-click the "Services" shortcut you made on the desktop, highlight the 4D Server service, and click the square "stop" button (looks like a "Stop" button on a media player)

Creating a new data file or choosing a different data file

From this point there should be no need to revisit any of the above procedures to operate mSupply.

However, if you are testing, or starting a data file for a second organisation, you may wish either to change the data file mSupply is using or to create a new file.

The mSupply program (the files named "mSupply.4DC" and "mSupply.RSR") store the path to the last data file used, and the next time mSupply is started, the previous data file that was open is opened again unless there is user intervention or the "old" data file has been moved to a new location.

To intervene, hold down the "alt" key as the 4D server starts up.

You will be shown the standard open/save window:

Open							? ×
Look in:	🔁 Data			-	* 🖻		
History	WebFolder	data					
Desktop							
My Documents							
My Computer							
Mu Natural P	File name:	my_precious_dat	a		▼		Open
My Nework 1	Files of type:	Data File (*.4dd)			-		Cancel
						New	
							A

To create a new data file, click the "New" button.

To select an existing data file, navigate to the file's location then click the "Open" button.

Installing mSupply Client

Needed: mSupply Client software of the same version (or relatively recent) as the mSupply Server.



Obtain and run mSupply Client installer



You must be logged on as Administrator to install mSupply Client with the correct permissions. Please consult your IT support staff if you require assistance to achieve this.

• Once you have obtained the mSupply Client installer file, double click it to install.

The mSupply client will be installed in the folder C:\mSupply\mSupply client on your computer.

mSupply client installer also installs the following files and folders:

- A shortcut on the Desktop called mSupply client.
- A folder called "\4D\Network" in the Windows folder on the startup volume, which contains network component files that need to be present for 4D to communicate over a TCP (and other types of) network(s).
 - No reports are installed on 4D client. Each time 4D client connects to the Server, reports that have been added or modified on the server are automatically copied to the client.
 - Installers have been set up to overwrite existing files, so reinstalling the software will restore any potentially corrupted files to their original state. The installer will not overwrite your data files, unless you have been unwise enough to name your data file "example data"

and put it in the "example data" folder

For convenience, pin the mSupply client desktop shortcut to the taskbar.

If any other Windows users will use this computer to access mSupply, it is worth copying the mSupply client desktop shortcut to the C:\Users\Public\Desktop folder. This will place the shortcut on the desktop of each user. Each user will need to pin this shortcut from their desktop to the taskbar.



The C:\Users\Public\Desktop folder is normally a hidden folder. You will likely need to make it visible).

Additionally, if this computer is primarily used for running mSupply, then it is worth copying the mSupply client desktop shortcut to the Startup folder. The actual folder



name changes with Windows version so here are instructions: How to Add Programs, Files, and Folders to System Startup in Windows.

Starting the mSupply Client

Once the installation is completed, double-click the "start mSupply Client" shortcut on your desktop. A window something like this should appear:

📧 Co	onnection to 4D Server			×
	Welcome to 4D			
Rec	cent Available Custom			
	Servers			
	mSupply	BULLETTRAIN		
	isplay this dialog at next startu	p		
	#		Cancel	OK

The window lists available mSupply servers on your network (there should be only one!) Click on the server you wish to connect to.



Clicking the "OK" button will take you to the mSupply password entry window. For new data files, the password is user1 for the first user in the list. Click on the first user, then enter the password and click **OK**

Forcing mSupply Client to re-sync files from the server

Occasionally the mSupply client may fail to connect with the server for un-known reasons. Errors such as the "This database has not been compiled for 64-bit processors" has been encountered and can be fixed in the following manner. Please read on.



Sometimes simply forcing the mSupply client to retrieves all setup files from the server may just fix things.

To do this Double click on the mSupply Client icon and hold the "Alt" (option on MAC) key. You should see such a window open.

Connection to 4D Server	×
Welcome to 4D Recent Available Custom	
Servers	
mSupply CF ITS	
Display this dialog at next startup	
Cancel OK	

On the above window select the server and click the custom tab.

Connection to 4D Server	×
Welcome to 4D	
Recent Available Custom	
Name and Address of a published 4D Server:	
Database Name: mSupply	
ex accounting	
Network Address: 8 .70:19813	
ex: accounting.company.com or: 192.121.122.123:8858 or: [2001:0db&:85a3:0000:0000:8a2e:0370:7334]:19813	
Force the update of the local resources	
Display this dialog at next startup	
Cancel OK	

On the above window check the *Force update of local resources* checkbox and click the **OK** button.

This will force the mSupply client to get the resources from the server and past issue may now be resolved.

Close mSupply and restart normally without the "Alt" key and mSupply client should be able to connect to the server without errors.

mSupply Client software cannot see the mSupply Server?

 Server is not visible? To make it easy for you to connect, mSupply Server publishes details about available servers on a specific port. It is quite possible that products such as "Zone Alarm" and "Norton Personal Firewall" will block access to this port and stop discovery of the servers. Contact your system administrator if the list of available servers is blank. Of course, it may be possible that the mSupply Server service is not running. Check Services to establish that. Lastly, the Windows firewall may be blocking the server publishing it's presence - see below.
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Configuring Windows firewall on server

The Windows firewall may need to be adjusted to allow the Client to receive Server identification.

To locate an mSupply server on a network mSupply client broadcasts over the subnet on random UDP ports from 49157 and above. As such inbound UDP ports from 49157 upwards should be opened on the server firewall. If these UDP ports are not open on the server then the clients cannot automatically find the server. However clients can still be manually directed to the server IP address by holding alt when client is opening, and entering the IP address in the network address field of the custom tab.

The default ports for client/server communication in mSupply server are TCP 19812 & 19813. The server firewall will require inbound TCP ports 19812 and 19813 to be opened (however these ports can be changed in mSupply server if required).

The firewall on the Client machines could also block access to the server machine. Testing with the firewalls on the server / client machines temporarily turned off in various combinations will help to establish whether firewalls are blocking communications.

Manually configuring the mSupply client

Due to firewall or if you connect to mSupply server via a router, then you may need to enter in the IP address on the mSupply Client custom setting window.

Connection to 4D Server	×
Welcome to 4D	
Recent Available Custom	
Name and Address of a published 4D Server:	
Database Name: mSupply	
Network Address: 192.168.3.250	
or: 192.121.122.123:8858	
or: [2001:0db&85a3:0000:0000:8a2e:0370:7334]:19813	
Force the update of the local resources	
Display this dialog at next startup	
Cancel OK	

The data base name is always : **mSupply**

If mSupply server is serving via the default port (19813) then simply enter in the IP address. Otherwise, see more details on the Custom Tab.



As part of the installation, a batch file with the name **Reset** client temp folder is installed on the desktop. This is for use if the client begins to behave incorrectly in the future, as described on the 28.01. How to re-set the mSupply client page. It is not for use during installation so you can safely ignore it until it is needed in the future. It is safe to move the batch file to somewhere other than the desktop if needed.

mSupply Server configuration

Register mSupply

The procedure is described earlier in "Preferences" chapter of the mSupply manual. See The Register button

You will either have to phone or email the information to Sustainable Solutions to obtain a registration code.

The registration code is keyed to your Organisation name and the MAC address of the server. Changing either of these will require a new code, which we shall willingly provide. So, **take care when setting the Organisation Name!**

Configure mSupply preferences

Once registered, you may want to systematically to go through the mSupply Preferences and choose appropriate settings, and particularly setting up the **Secondary backups**! Start here: Preferences > General

Turn off web dashboard

If the web dashboard has been set up on the Primary Server, then the dashboard preferences will be copied to the Satellite site datafile. In most cases, the web dashboard is not being used on the Satellite site and it is an unnecessary interaction with the scheduler, so may as well be turned off:

Before v4.04:

- 1. File > Preferences... > Dashboard
- 2. Untick the 'We use the web dashboard'
- 3. Click OK

After v4.04, the dashboard is managed through the Admin page of the navigator:

1. Admin > Dashboard > Export Settings

- 2. Clear the Postgres Server entries
- 3. Click OK

board Reports Dashbo	oard Tab Export Settings		
Postgres Server			
-	Clear these		
Server	localhost		
	F 433		
Port	5432		
User	postgres		
Password			
Database Name	dashbased		Tast connection
Database Name	dashboard		Test connection
Database Name	dashboard		Test connection
Database Name	dashboard		Test connection
Database Name Export Settings	dashboard		Test connection
Database Name	dashboard	Expert	Test connection
Database Name Export Settings	dashboard Table	Export	Test connection
Database Name Export Settings	dashboard Table abbreviation account	Export	Test connection
Database Name Export Settings	Table abbreviation account Admitted_from	Export	Test connection
Database Name	Table abbreviation account Admitted_from aggregator	Expert	Test connection
Database Name	Table abbreviation account Admitted_from aggregator asset	Expert	Test connection
Database Name	Table abbreviation account Admitted_from asset asset asset_condition	Expert A	Test connection
Database Name	Table abbreviation account Admitted_from aggregator asset asset_ocndtion asset_ocation asset_status	Export	Test connection
Database Name	Table abbreviation account Admitted_from asprejator asset asset_ocation asset_location asset_location asset_location	Expert	Test connection
Database Name	Table abbreviation account Admitted_from aggregator asset_condition asset_location asset_status c	Expert	Test connection Export

Configure secondary backups

You should have already configured the primary backup. We recommend setting up a secondary backup which will send a backup off-site using a service such as Dropbox. The frequency of this depends largely on what bandwidth your site can afford. Each backup can easily get to GB sizes...:

- File > Preferences... > Backup 2
 - Configure secondary backups

Turn on Synchronisation

When you are finally ready to turn on synchronisation:

- File > Preferences... > Synchronise > Click to un-lock, enter code to edit.
 - Set the Sync time interval to 1
 - $\circ~$ Click OK



Your installation of mSupply may have customisations made specifically for your work scenario. Please contact our



support staff on support@msupply.org.nz to manage these customisations.

Configure label printer

If you are dispensing, you will need to set up label printer preferences

Graceful shutdown in the event of a power failure

Your mSupply server should be attached to a UPS. The UPS should be fitted with a control cable (serial, USB or network cable) that allows control software to detect a low power situation and shut down the server.

In the UPS control software set the shutdown to start at least two minutes before the power will fail.

Set it to run a batch file at that point. The file should contain the single line "net stop Service name" where the service name is the name displayed in the properties when you double-click the service name in the services window. In the example below the service name is "4DS mSupply.4DC" (not to be confused with the display name)

Service name:	4DS mSupply.4DC
Display name:	4D Server: mSupply
Description:	

You may wish to test your typing skills by opening a command prompt:



Accessing mSupply client on a cloud server

If the mSupply client software is running on a PC, there are a range of applications that can be used for accessing the cloud hosted mSupply server including Microsoft's own Remote Desktop Connection software that comes included with Microsoft Windows. We recommend TS-Plus, which allows users to access client on the server via their web browser.

Troubleshooting

Permission for backup setting file

Since v17 of 4D (the database engine underlying mSupply), when running mSupply as a Service, logging on as the Local System Account (**LSA**, as described below), mSupply **MAY** no longer have sufficient permissions to access the folder: C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup

If this is the case, it will result in the following error:

	Error
	Error when executing the method "* On Backup Shutdown" at line number 90 The document cannot be opened.
	Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply \mSupply Server\Server Database\Preferences\Backup\Backup.XML)
(D	etails Edit Trace Continue Abort
O D	Abort Save Copy
O D Proces	Edit Trace Continue Abort ss 9 BackupProcess Save Copy Description Save Copy
O Proces	Interview Edit Trace Continue Abort Save Copy Description Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply.
O Proces	Edit Trace Continue Abort ss 9 BackupProcess Save Copy Description Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply. Access denied C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup\Back
D D	Itetails Edit Trace Continue Abort ss BackupProcess Save Copy Description Save Copy Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply. Save Copy Access denied C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup\Back Access is denied.
Proces No -54 5 5	Edit Trace Continue Abort ss 9 BackupProcess Save Copy Description Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply. Access denied C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup\Backup\Backup Access is denied. Access is denied. Access is denied.
D D Proces No -54 5 5	Itetails Edit Trace Continue Abort ss BackupProcess Save Copy Description Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply. Access denied C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup\Back Access is denied. Access is denied. Access is denied.
Proces No -54 5 5	Itetails Edit Trace Continue Abort Save Copy Save Copy Description Permissions error. Attempt to open locked file for writing. (File: C:\Program Files\mSupply\mSupply. Access denied C:\Program Files\mSupply\mSupply Server\Server Database\Preferences\Backup\Back Access is denied.

If this happens, it needs to be fixed. The Solution is to edit permission of **Users** to allow Full control/Modify/Write to the Backup.XML file as shown here:



Previous: 25.02. mSupply client / server installation part 2 || Next: 25.04. Schedules and periods

